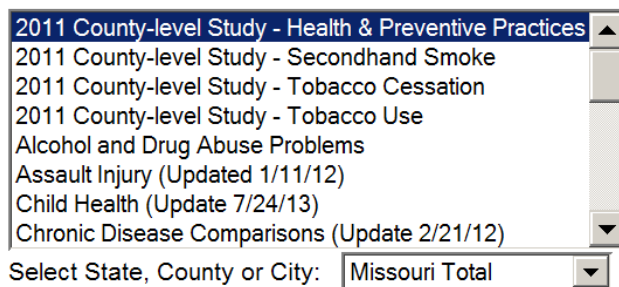


Missouri has one of the highest prevalence percentages for current smoking in the nation. According to 2012 BRFSS survey estimates, 23.9 percent of adult Missouri residents are current smokers. Only eight other states have higher current smoking estimates. According to Healthy People 2020, “[t]obacco use is the single most preventable cause of death and disease in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses. For every person who dies from tobacco use, 20 more people suffer with at least 1 serious tobacco-related illness.” The CDC has developed a statistic to estimate the number of deaths attributable to smoking. It is based on smokers’ increased likelihood of dying from various diseases. Using this algorithm, approximately 9,600 Missouri deaths can be attributed to smoking annually.

Several Community Data Profiles contain indicators related to tobacco use in Missouri. Most of these indicators are included in the 2011 County-Level Study Profiles, which are the first four listed in the selection box, as shown below. To retrieve data from the 2011 County-Level Study – Health and Preventive Practices Profile, highlight that Profile in the selection box and click the submit button.

Select a Profile:



A screenshot of a web form. At the top, it says "Select a Profile:". Below this is a dropdown menu with a list of profiles. The first profile, "2011 County-level Study - Health & Preventive Practices", is highlighted in blue. Other profiles include "2011 County-level Study - Secondhand Smoke", "2011 County-level Study - Tobacco Cessation", "2011 County-level Study - Tobacco Use", "Alcohol and Drug Abuse Problems", "Assault Injury (Updated 1/11/12)", "Child Health (Update 7/24/13)", and "Chronic Disease Comparisons (Update 2/21/12)". Below the profile list is a text box labeled "Select State, County or City:" followed by a dropdown menu showing "Missouri Total".

2011 County-level Study - Health & Preventive Practices	▲
2011 County-level Study - Secondhand Smoke	
2011 County-level Study - Tobacco Cessation	
2011 County-level Study - Tobacco Use	
Alcohol and Drug Abuse Problems	
Assault Injury (Updated 1/11/12)	
Child Health (Update 7/24/13)	
Chronic Disease Comparisons (Update 2/21/12)	▼

Select State, County or City:

submit

The Health and Preventive Practices Profile, shown below, contains indicators on a variety of health topics, including **Current cigarette smoking**. The Profile provides the **number of respondents** who were asked about their current smoking status, the **prevalence percentage** (or estimated percentage of adult residents who currently smoke), and the **95% upper and lower confidence intervals**. The confidence intervals estimate the reliability of the prevalence percentage.

## County Level Study 2011 - Health & Preventive Practices for Missouri Adults

[County-level Study Home](#) [Select a different geographical area](#) [Main profile page](#) [Age-adjusted weighted percent](#) [Print Profile](#)

All	Race	Gender	Age	Income	Rural-urban	Education Level	Health Insurance Status					
Indicator							Number of Respondents	Prevalence (%)	95% CI Lower	95% CI Upper	Download Indicator Data	
<a href="#">Ever been told had a depressive disorder</a>							50,107	20.6	19.9	21.4		
<a href="#">Ever been told had kidney disease</a>							50,139	2.6	2.3	2.8		
<a href="#">Ever been told have vision impairment</a>							49,851	18.5	17.8	19.2		
<a href="#">Has diabetes</a>							50,247	10.7	10.1	11.2		
<a href="#">Overweight (25.0-29.9 BMI)</a>							47,712	34.3	33.4	35.3		
<a href="#">Obese (&gt;30 BMI)</a>							47,712	30.2	29.3	31.0		
<a href="#">Current cigarette smoking</a>							50,039	23.0	22.2	23.8		
<a href="#">No leisure time physical activity</a>							50,127	23.7	23.0	24.5		
<a href="#">Use walking trails, parks, playgrounds or sports fields for physical activity</a>							49,434	44.4	43.4	45.3		
<a href="#">Have sidewalks in their neighborhood</a>							50,104	53.7	52.8	54.6		
<a href="#">Have roads and streets with shoulders or marked lanes for bicycling in their community</a>							49,408	31.6	30.7	32.6		
<a href="#">Consider their neighborhood to be extremely or quite safe</a>							49,517	80.5	79.7	81.2		
<a href="#">Strongly agree or agree that it is easy to purchase healthy food in their neighborhood</a>							49,261	82.2	81.5	82.9		
<a href="#">Ate fruits and vegetables less than 5 times per day</a>							50,006	87.4	86.8	88.1		
<a href="#">Never had a mammogram - among women age 40 and older</a>							26,743	10.0	9.1	10.9		
<a href="#">No mammogram or clinical breast exam in last year among women age 40 and older</a>							26,216	30.6	29.2	31.9		
<a href="#">Never had a pap smear - among women age 18 and older</a>							31,013	7.6	6.8	8.3		
<a href="#">No pap smear in last 3 years - among women age 18 and older</a>							30,483	26.5	25.4	27.6		
<a href="#">Have had a blood alcohol test - among men and women age 18 and older</a>							24,077	66.1	65.0	67.2		

\* = Percents are not provided for indicators with less than 50 respondents.

[Print Profile](#)

All of the indicators in the other three County-Level Study Profiles relate to tobacco in some way. The Secondhand Smoke Profile includes indicators on exposure to and beliefs about indirect inhalation of tobacco. The Tobacco Cessation Profile contains data on smokers' attempts to quit using tobacco. The Tobacco Use Profile covers other forms of tobacco in addition to cigarettes, as well as beliefs about the health impacts of cigarettes. An excerpt from the Secondhand Smoke Profile is shown below.

## County Level Study 2011 - Secondhand Smoke for Missouri Adults

[County-level Study Home](#) [Select a different geographical area](#) [Main profile page](#) [Age-adjusted weighted percent](#) [Print Profile](#)

All	Race	Gender	Age	Income	Rural-urban	Education Level	Health Insurance Status					
Indicator							Number of Respondents	Prevalence (%)	95% CI Lower	95% CI Upper	Download Indicator Data	
<a href="#">Live with someone that smokes cigarettes</a>							34,505	24.4	23.5	25.3		
<a href="#">Exposed to secondhand smoke in own home during past week</a>							49,884	14.9	14.2	15.6		
<a href="#">Smoking not allowed in the home</a>							49,993	70.8	70.0	71.7		
<a href="#">Exposed to secondhand smoke in a car during past week</a>							50,122	26.4	25.6	27.2		
<a href="#">Smoking not allowed in car</a>							47,299	65.6	64.7	66.5		
<a href="#">Exposed to secondhand smoke at work during past week among those who work indoors</a>							15,741	7.6	6.9	8.4		
<a href="#">Smoking not allowed in work areas at work among those who work indoors</a>							15,676	83.9	82.7	85.0		
<a href="#">Smoking not allowed in public areas at work among those who work indoors</a>							15,563	84.9	83.8	86.0		
<a href="#">Want stronger workplace smoking policy among those who work indoors</a>							15,453	10.9	10.0	11.8		
<a href="#">Employer offered cessation assistance to employees within the past year</a>							13,532	35.5	33.9	37.1		
<a href="#">Did not go to a restaurant in past year because smoking was permitted</a>							49,739	14.1	13.4	14.8		
<a href="#">Did not go to a restaurant in past year because smoking was not permitted</a>							49,687	6.4	6.0	6.9		
<a href="#">Would support a change in missouri law to make all workplaces smoke free</a>							45,691	55.9	54.9	56.9		
<a href="#">Asked a stranger not to smoke around them in past year</a>							49,986	12.9	12.3	13.6		
<a href="#">Thing breathing other people's cigarette smoke is very or somewhat harmful to one's health</a>							46,700	88.3	87.7	88.9		
<a href="#">Believe secondhand smoking causes:</a>												
<a href="#">Heart disease in adults</a>							39,821	64.5	63.4	65.5		
<a href="#">Colon cancer in adults</a>							34,134	29.3	28.3	30.3		

\* = Percents are not provided for indicators with less than 50 respondents.

[Print Profile](#)

Tobacco-related data are also available through several other sources within the MICA system.

- The Alcohol and Drug Abuse Profile links to state and county reports developed and maintained by the Missouri Department of Mental Health. The Substance Abuse and Mental Health Indicators report includes numbers of mothers who reported smoking while pregnant, smoking-induced deaths, and school suspensions of ten or more days for tobacco incidents. The Community Profile report discusses data on beliefs about cigarettes, current cigarette use for grades 6-12 and ages 18+, and smoking during pregnancy.
- The Youth Risk Behavior Surveillance System (YRBS) contains several smoking indicators derived from high school and middle school surveys. Only state-level data are available. YRBS data can be accessed through the MICA home page.
- The Birth, WIC Prenatal, WIC Postpartum, and WIC Prenatal-Postpartum Combined MICAs include indicators on the smoking status of mothers.
- The Leading Causes of Death and the Women's Health Profiles both contain estimates on the number of smoking-attributable deaths.

In response to the high rates of smoking in Missouri, several communities have enacted smokefree laws. A listing of these communities is available at <http://www.tobaccofreemo.org/wp-content/uploads/2012/07/Smokefree-Laws-in-Missouri.pdf>.

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## Summer 2013 Trainings

The 2013 summer training season is now complete. Because of work projects in the office, we did not travel quite as extensively this year. We ultimately offered two days of training classes (*Introduction to Profiles and MICA* and *Health Data Analysis*) at four sites (Columbia, Springfield, St. Louis, and Kansas City). We drove approximately 1,180 miles on Missouri's roads over the course of the summer.

This year marked the end of our CDC-sponsored Assessment Initiative (AI) grant. Over the past five years, we have been fortunate to be able to travel all across the state, from St. Joseph to Sikeston, from Kirksville to Joplin, and to many points in between. It has been a rewarding experience. Through the AI grant we have offered a total of 59 training classes to wide-ranging audiences including LPHAs, university faculty and staff, school nurses, hospital staff, not-for-profit groups, and several other organizations and individuals. St. Louis had the most training classes offered with a total of 11. Kansas City was second with 7 (or 9 if you count 2 days we spent in Liberty in 2010). As far as attendance, 423 individuals have taken Course 1, 329 have taken Course 2, and 63 have participated in the *Data Workshop*.

We have had our share of adventures and emergencies during this time. We estimate that our total summer training mileage is about 8,800 miles. We have been evacuated from the Kansas City Health Department during a fire alarm. We have seen flooding at Cape Girardeau. We even had a near miss with the Joplin tornado in 2011. However, we never had any car trouble – until our last night, when our car broke down at the gas station in Jefferson City as we were refilling it one last time. Luckily, we only had to wait about ten minutes before we were rescued by another state employee. Here is a picture of the stranded Andy.





Going forward, we hope to find funds to continue offering trainings and other types of assistance so that persons across the state can better utilize the public health statistic resources available through the DHSS and other related sites.

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### **Public Health Spotlight**



Victoria Fehrmann Warren is the Comprehensive Tobacco Control Manager in the section of Community Health and Chronic Disease Prevention, Bureau of Community Health and Wellness. She attended the University of Missouri, where she received a Bachelor of Arts degree in Biology and a Master of Arts degree in Community Development. She started her career at DHSS 30 years ago and worked in a variety of programs such as WIC, Healthy Babies, Cancer Control, and Diabetes Prevention and Control before accepting her current position in Tobacco Control. She has progressed from her first DHSS position of Health Program Representative II in a field office in Macon to

Program Coordinator. Victoria has found all her work in public health interesting and she is very enthusiastic about it! She says, “It is best to work with the people, not for the people.”

Currently, Victoria and her staff are responsible for the Comprehensive Tobacco Control Program (CTCP), which focuses on reducing the burden of tobacco on the state of Missouri. It is funded by the Centers for Disease Control and Prevention (CDC) and was initiated in Missouri in the 1990s. The principal goals of the CTCP program are: to reduce smoking rates for adults and youths; to prevent youth from starting to smoke; to reduce exposure to secondhand smoke; and to reduce disparities that intersect with the three goals mentioned above.

Victoria says that her graduate training in community development equipped her with skills to assess communities in many ways, including using data. She says that she is not an expert in how data are obtained but believes in using data, trusting that those who are experts have done it using appropriate scientific and statistical methods. Working with data has been an important part of her career here at DHSS. “It drives how we make decisions, shows where things are happening or not happening, and [highlights] where things need to be paid attention to.”

Victoria likes to travel all over the U.S. and Canada and has visited all but a few states. She briefly lived in Germany, where she spent six months as an exchange student after graduating from college. When this interview was conducted earlier this year, Victoria said that she liked to spend time with her husband, who was undergoing hospice care, and their two Dachshunds and watch television with them. Unfortunately, her husband recently passed away. We wish her peace and comfort during this difficult time.

More information about the Comprehensive Tobacco Control Program is available at <http://health.mo.gov/living/wellness/tobacco/smokingandtobacco/>.

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## Upcoming MICA Trainings

Sessions of *Introduction to Profiles and MICA* and *Health Data Analysis* have been scheduled for the following dates and locations. To register, please e-mail [Andrew.Hunter@health.mo.gov](mailto:Andrew.Hunter@health.mo.gov) and [Becca.Mickels@health.mo.gov](mailto:Becca.Mickels@health.mo.gov).

<b>Location:</b>	<b>Course 1: <i>Introduction to Profiles/MICA</i></b>	<b>Course 2: <i>Health Data Analysis</i></b>	<b>Course 3: <i>Health Data Workshop</i></b>
<b>Missouri Department of Health and Senior Services</b> 912 Wildwood Drive Wild Birch Conference Room Jefferson City, MO 65109	January 15, 2014  Deadline: January 8  <b>OPEN TO DHSS EMPLOYEES ONLY</b>	January 16, 2014  Deadline: January 8  <b>OPEN TO DHSS EMPLOYEES ONLY</b>	N/A
<b>Missouri Department of Health and Senior Services</b> 912 Wildwood Drive Wild Birch Conference Room Jefferson City, MO 65109	February 25, 2014  Deadline: February 18	February 26, 2014  Deadline: February 18	N/A

Additional information about the trainings is available on our training website (<http://health.mo.gov/data/mica/MICA/healthdatatraining.html>).

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## Data Updates

Several of the Profiles and Data MICAs have been updated since the publication of the last newsletter.

Birth MICA – through 2010  
Cancer Registry MICA – through 2010  
Chronic Disease MICA – through 2011  
Emergency Room MICA – through 2011  
Fertility Rate MICA – through 2010  
Hospital Discharges, Charges and Days of Care MICA – through 2011  
Injury MICA – through 2011  
Inpatient Hospitalization MICA – through 2011  
Medicaid MICA – through August 2013  
Priorities MICA – Patient Abstract System (Hospital/ER) data through 2010  
TANF (Temporary Assistance for Needy Families) MICA – through August 2013

Child Health Profile – most data sources through 2011  
Leading Causes of Death Profile – through 2011  
Delivery Profile – through 2010  
Diabetes Profile – hospital and mortality data through 2011  
Emergency Room Profile – through 2011  
Heart Disease Profile – BRFSS, mortality, and Patient Abstract System data through 2011  
Hospital Revenues Profile – through 2012  
Infant Health Profile – birth data through 2010  
Minority Health Profile – through 2009  
Preconception/Family Planning Profile – birth data through 2010  
Prenatal Profile – through 2010  
Stroke Profile – BRFSS, mortality, and Patient Abstract System data through 2011

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## Recent/Upcoming Events

Over the past several months, the training team traveled throughout the state to offer sessions of *Introduction to Profiles and MICA* and *Health Data Analysis* to a wide variety of users (see the **Summer 2013 Trainings** article above). We gave a few presentations locally as well. On April 2 and 3, we had the opportunity to meet new local public health agency administrators at their annual training on the DHSS campus. Becca and Becky first had a chance to chat with administrators and introduce them to the MICA tools at an exhibit. The next day, Andy and Becca presented an overview of the Data MICAs and Community Data Profiles in the DHSS training lab. Congratulations to all of the new administrators on their promotions!

The team also demonstrated the tools to the new class of Dietetic Interns working with DHSS. The Dietetic Internship program offers both educational and clinical experiences to participants, and we assist them with data needs as they work on projects.

Andy and Becca presented an overview of the *Healthy People 2020 Objectives – Missouri Data Resources* website at the 2013 Joint Annual Public Health Pre-Conference on September 24 at the Stoney Creek Inn in Columbia. The conference was presented by the Missouri Public Health Association, the Missouri Association of Local Public Health Agencies, the Missouri Association of Local Boards of Health, the Missouri Institute for Community Health, and the Missouri Department of Health and Senior Services. We have been working closely with a Data Access Workgroup composed of several local public health agency and DHSS staff, and this website is one result of our collaboration.

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## Q&A

*Do the rates in the MICAs sometimes change? For example, in the past I wrote a report on heart disease mortality. The 2009 Missouri rate listed on MICA at that time was 201.3 per 100,000 population. Now MICA lists that rate as 205.0 per 100,000 population. What is going on?*

You are correct! The rates in MICA do sometimes change. This occurs when we load new population estimates. The formula used to calculate a rate is (Number of Events/Population at Risk) x Constant. In your example, although the number of events occurring in 2009 did not change, an updated population estimate may have changed the overall rate.

The population figures collected as part of the decennial Census (most recently conducted in 2010) are considered official and do not change. However, the Census Bureau releases new estimates annually for each intercensal year back to the last Census. For example, we currently have 2011 population estimates loaded into Population MICA. With the next Census Bureau release, we will get a new 2012 estimates file and a revised 2011 file, so the 2011 rates may change at that time. (The numbers in Population MICA are used in the rate calculations for the other MICA datasets.) In your case, when the Census Bureau released the 2010 Census population figures, final revised estimates were also released for years 2001 through 2009. These numbers/rates are now considered locked and should not change again.

Updating population estimates to the latest available figures is standard practice for most data systems. However, we understand that this can cause frustration for users who may be midway through a project at the time of the update. To better serve our customers, we have revised the population change notice that appears on the home page of each affected MICA and plan to post a warning approximately two weeks before we load the next set of estimates.

The screenshot shows the 'Death MICA' website. The main header is 'Death MICA' with a sub-header 'Home » Data, Surveillance Systems & Statistical Reports » Death MICA'. Below this is a navigation menu with links: Definitions, User Handbook, Documentation, MICA Newsletter, Data Training, Data and Surveillance Systems, and Vital Statistics. A red box highlights a notice: 'Population estimates have been updated to reflect the most recently released estimates from the Census Bureau. Rates obtained from this site prior to this update will be different from the current rates as a result of this change to the population estimates. The last update occurred on March 7, 2013, and affected years 2001-2009.' To the right is a 'Data & Statistics' sidebar with links to Profiles, MICA, Priorities MICA, Community Health Improvement Resources (CHIR), Intervention MICA, Births, Deaths, Patient Abstract System (PAS), and Behavioral Risk Factor Surveillance System (BRFSS).

The rates in the Community Data Profiles do not change until the overall Profile is updated. This usually occurs annually. As a result, a rate obtained from the Profiles may not match a rate for the same indicator found in MICA.

## Practice Exercise

Many of you have asked for additional exercises so that you can practice the skills you learned at the MICA trainings. Here is a chance for you to do so. If you would like to check your work, the answers are posted on the DHSS website. A link to the answer key is provided at the bottom of this section.

Motor vehicle accident death rates are higher in rural regions compared to urban areas. Use the Leading Causes of Death Profile to answer the following questions related to Motor Vehicle



Accident Deaths in Cass County and Bates County. These two counties are adjacent to each other in west-central Missouri. By some definitions Cass is considered urban while Bates is considered rural.

1) What is the age-adjusted motor vehicle accident death rate for Cass County?

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2) Is the Cass County rate significantly different from the state rate?

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3) What is the age-adjusted motor vehicle accident death rate for Bates County?

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4) Is the Bates County rate significantly different from the state rate?

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5) What time period was used to calculate these rates?

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6) Why was this time period used?

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7) What constant was used in calculating these rates?

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8) What DHSS tool could be used to determine if there is a statistically significant difference between Cass County and Bates County?

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Visit <http://health.mo.gov/data/mica/MICA/solutions.html> to check the solution.

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## Final Thoughts

We were sad to bid farewell to one of our colleagues, Rashmi Davanagere. Some of our readers had the opportunity to meet Rashmi during the Columbia MICA trainings in late May. Rashmi has returned to her native country of India, where she now lives with her son. We wish her the best of luck in her new endeavors!



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## About the MICA User Group Newsletter

The MICA User Group Newsletter was created in response to user requests for communication on updates to the MICA system, descriptions of new features, additional practice exercises, announcements of training opportunities, and any other new information about data that might help them perform their jobs more efficiently.

Newsletters will be published on a quarterly basis. If you have ideas for content, please send them to [Andrew.Hunter@health.mo.gov](mailto:Andrew.Hunter@health.mo.gov) or [Becca.Mickels@health.mo.gov](mailto:Becca.Mickels@health.mo.gov). We would especially like to feature stories describing your success at completing projects or obtaining grants using the MICA tools as well as interviews with public health professionals about your duties and how you use MICA to accomplish them.

Past issues are available at <http://health.mo.gov/data/mica/MICA/newsletters.html>.

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## **How to Sign Up or Opt Out**

If you have enjoyed this newsletter, please feel free to share it with your colleagues and community partners. We encourage them to sign up for the MICA User Group by sending an e-mail to [Andrew.Hunter@health.mo.gov](mailto:Andrew.Hunter@health.mo.gov) or [Becca.Mickels@health.mo.gov](mailto:Becca.Mickels@health.mo.gov) with the subject line MICA User Group. This will let us know to send newsletters to them directly so they do not miss any information. Also, we may occasionally distribute time-sensitive information on topics such as training opportunities via e-mail if the newsletter is not scheduled for publication prior to a registration deadline. Finally, the MICA User Group list helps us track the types of organizations using the tools, which is one of our performance measures.

If you would like to opt out of the MICA User Group, please send an e-mail with Unsubscribe in the subject line to [Becca.Mickels@health.mo.gov](mailto:Becca.Mickels@health.mo.gov). PLEASE NOTE: Depending on your position title, you may still receive other types of e-mail messages from us. For example, we are requested to send training information to all LPHA Administrators, even if they have unsubscribed from the MICA User Group.

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